- 1. An immersion fluid dispenser for microscopes that manually deposits the proper amount of fluid on the specimen (upright systems) or front lens (inverted systems) for immersion optics applications.comprising:
- 2. The dispenser of claim 1, further comprising:
  a two stage mechanical configuration that both positions the dispensing port from a
  remote location to the desired application point and then delivers the proper amount of
  immersion fluid.
- 3. The dispenser of claims 1 and 2, further comprising: the ability to be combined with a fluid extraction system for the removal of the deposited fluid at the completion of the immersion optics task.
- 4. The dispenser of claims 1,2, or 3, further comprising: the ability to automatically sense the particular objective lens in use and correspondingly modify the drop dispensing parameters a remotely located delivery system that does not require an alteration or mechanical attachment to the microscope's optical components.
- 2. The immersion dispenser of claim 1 further comprising: a configuration wherein the dispenser is mechanically attached to the non-moving section of the microscope's stage.
- 3. The immersion fluid dispenser of claim 1 or 2 further comprising: a vacuum-based extraction system capable of removing the applied fluid.

## **BRIEF DESCRIPTION OF DRAWINGS**

In the drawings:

FIG. 1 is a side view of the dispensing mechanism.

FIG. 2 is a top view of the dispenser in its stowed condition

FIG. 3 is a top view of the dispenser in position to dispense the fluid.

FIG. 4 is a top view of the dispenser at the end of the dispensing cycle

FIG. 5 is a functional drawing of the peristaltic dispensing assembly.

## **DRAWINGS**

Changes have been made to Figure 1 to depict the vacuum plumbing that had been previously omitted. The original drawing is presented first, followed by the revised version. A complete set of the updated drawing package is contained in the appendix.